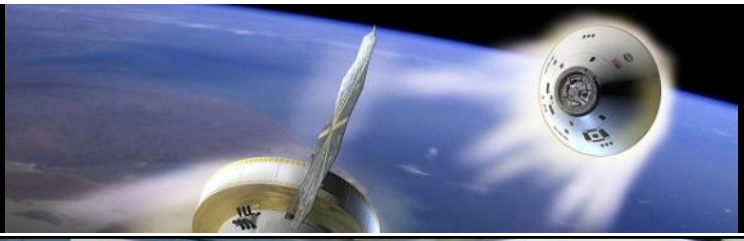
ORION
CREW EXPLORATION VEHICLE
WEEKLY ACCOMPLISHMENTS



01.14.11

The Orion software team successfully completed and delivered Software Release 6.1. This milestone marks the first time that the various software applications that control different Orion processes (such as navigation, communications, environmental control, etc.) have been combined into one integrated software product. This software release is currently being evaluated in an environment that includes simulated Orion avionics components and will be integrated on a test configuration with a complete Orion flight computer brassboard (shown above) when it becomes available in early February in the Engineering Development Laboratory in Houston. This milestone is a precursor to Integrated Synch Point 4 (ISP 4) currently scheduled for late March. ISP 4 is a key development step in the build-up of the Orion integration and test facilities and will include Software Release 6.2 Beta, brassboard computer hardware, Orion simulation software running on in-development simulation host hardware, along with Ground Support Equipment that will provide test engineers with a command interface, telemetry displays, and data archival capabilities.

The final shipment of Crew Module Ground Test Article (GTA) tooling (shown above) arrived at the Lockheed Martin Waterton facility in Denver, Colorado. The tooling was designed to be easily transported and was recently in place at the Operations and Checkout Facility at Kennedy Space Center in Florida. The tooling will be used to continue work on the Crew Module Ground Test Article when it arrives from the Michoud Assembly Facility in New Orleans, Louisiana in February.

Fabrication of the boilerplate test article (shown left), which will be used for water impact testing at the new Hydro Impact Basin, is complete. The boilerplate test article was recently transported from the hangar annex at Langley Research Center to Langley Air Force Base where it will be painted.